

Notice of Allowability

Application No.

10/623,146

Examiner

Tuan V. Thai

Applicant(s)

ADAMO ET AL.

Art Unit

2186

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 11/10/2006.
2. ☒ The allowed claim(s) is/are 1-20 renumbered as 1-1416-20 and 15 respectively.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

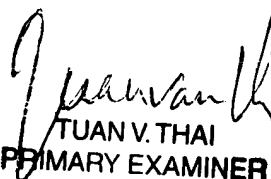
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |


TUAN V. THAI
PRIMARY EXAMINER
Group 2100

Art Unit: 2186

IN THE UNITED STATES PATENT AND

In re application of: Yamamoto et al. **Group:** 2186
Serial No.: 10/623,146 **Examiner:** Tuan Thai
For: ***PROCESS FOR MANAGING SYSTEM STACKS IN MICROCONTROLLERS,
CORRESPONDING DEVICE AND COMPUTER PROGRAM PRODUCT.***

1. This action is responsive to amendment filed November 10, 2006. Claims 1-20 are now allowed.

2. The rejection of claim 1 under 35 USC § 101 is withdrawn due to the amendment filed November 10, 2006.

REASONS FOR ALLOWANCE

3. The following is an Examiner's Statement of Reasons for Allowance:

The prior arts of record do not teach nor suggest, *either alone or in combination*, all the limitations of the amended claims of the current invention (claims 1, 6, 14 and 15) particularly a method and system having a stack management device associated with a microcontroller having a number of interrupts wherein the device having a first memory stack comprising a register for a Program Counter signal, a second memory stack for a Condition Code Register signal that includes a number of bits,

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the second memory stack being made up of a bank of memory elements equal in number to the bits of the Condition Code Register signal times the number of interrupts of the microcontroller, and at least one manager module configured to cause the first and second memory stacks to function in parallel by respective stack pointer signals (claim 6). Similarly for claims 1, 14 and 15. Claims 2-5, 7-13, 16-19 and 20 are also allowable since they are depended upon the indicated allowable claims 1, 6, 15 and 14 respectively.

Any comments considered necessary by Applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan V. Thai whose telephone number is (571)-272-4187. The examiner can normally be reached on from 6:30 A.M. to 4:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mathew M. Kim can be reached on (571)-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application

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may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TVT/November 22, 2006

A handwritten signature in black ink, appearing to read 'Tuan V. Thai', with a stylized, cursive script.

Tuan V. Thai

PRIMARY EXAMINER

Group 2100